

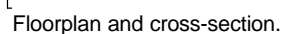
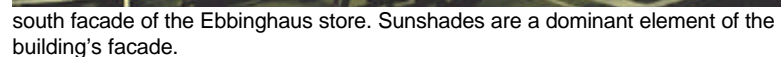
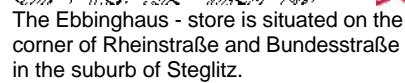
predominantly cloudy

sunshades to reduce cooling loads



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The concept of the original design was to provide the customers with a nice view to the outside while buying new clothes. However, the high light contrast between the outside and the inside made the interior seem dark and unpleasant resulting in the merchandises looking less attractive. Consequently filters and obstructing elements were incorporated into the South facade to reduce and to smoothen the daylight. Today the large glass front permits almost no light and the view to the outside is obstructed completely. The building depends on electric lighting and has high cooling loads. Despite this considerable energy consumption the building does not provide the occupants with a comfortable indoor climate. Altogether this example shows how occupants react, if a daylight strategy does not perform well.

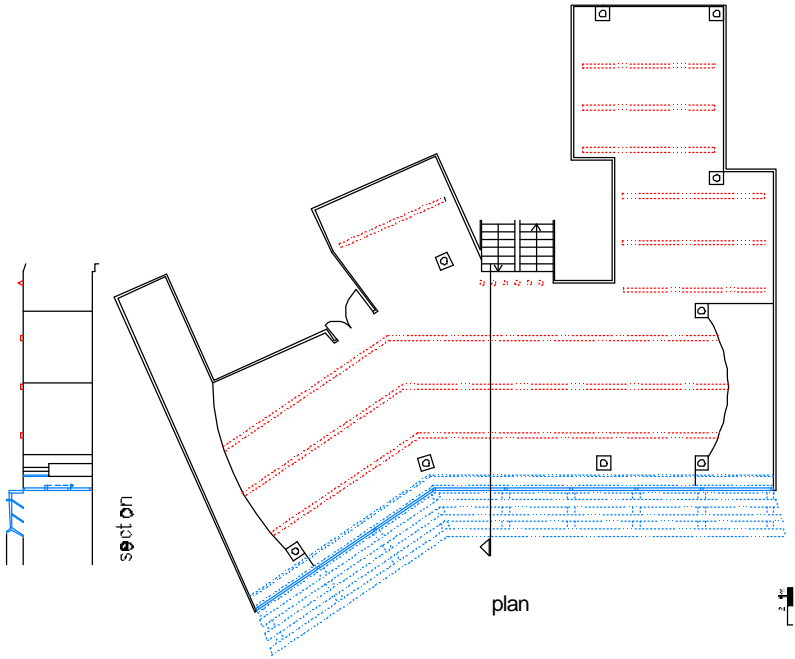




Daylight is excluded by a number of systems. The salesroom depends on electric lighting, the view to the outside is obstructed.



Detail of the South facade showing elements that have been introduced to reduce and to smooth daylight.



building data

- size 3 200 m²
- number of stories 4
- architect Hans Schäfers
- year of completion 1962

salesroom

- daylight strategy sidelighting
- dimensions (depth/width/height) 8,0 m / 23,0 m / 3,0 m
- room area 270 m²
- floor carpet, brown, 30%
- wall timber veneer, 30%
- column timber veneer, 30%
- ceiling plastic lining, white, 60%
- built-in furniture timber veneer, 30%
- window frame anodized aluminum, silver, 80%
- window double, float
- lamp types fluorescent lamps
- installed power density 26 W/m²
- control strategy manual switching

facade		south facade	west facade
data	orientation	172°/207°	272°
	glazed area	45,3 m ²	6,8 m ²
	opening index	0,65	0,17
function	daylighting	●	●
	view outside	●	—
	ventilation	—	—
	operable	●	—
	shading	●	—
	redirection	—	—
systems		sunshades	translucent glazing
function	sun shading	●	—
	glare protection	●	—
	redirection	—	—
location	inside	—	●
	window pane	—	●
	outside	●	—
	movable	—	●
	fixed	●	—